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10/679,817	10/06/2003	William R. Krenik	TI-37218	3406

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EXAMINER	
AJIBADE AKONAI, OLUMIDE	
ART UNIT	**PAPER NUMBER**
2686	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/679,817	**Applicant(s)** KRENIK ET AL.	
	Examiner Olumide T. Ajibade-Akonai	**Art Unit** 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *12/31/2003*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 3, 5, 7-13, 15-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by **Gallagher et al (20040192211)**.

Regarding **claim 1**, Gallagher et al discloses a system for supporting wireless communication, comprising: a first fixed-site wireless communication apparatus (base station 18-1, see fig. 8, p.6, [0069]), a second fixed-site wireless communication apparatus (base station 18-2, see p.6, [0069]), and a wired communication channel (LAN 28, see fig. 8, p.6, [0069]) connected between said first fixed-site wireless a wired communication apparatus and said second fixed-site wireless communication apparatus (base stations 18-1 and 18-2 communicate with each other through LAN 28, see fig. 8, p.6, [0069]), said first fixed-site wireless communication apparatus for receiving from a wireless mobile communication apparatus (subscriber device 12, see fig. 8, p.6, [0069]) information (signal strengths and/or range numbers, see p.6, [0071) for use in determining whether a desired wireless communication session involving the wireless mobile communication apparatus will be established (device 12 broadcasts a message containing the signal strength and range numbers to base station 18-1 as it moves to T3, see fig. 8, p.6-7, [0071]), said first fixed-site wireless communication apparatus further for communicating said information to said to said second fixed-site wireless communication apparatus via said wired communication channel (base station 18-2 receives the message via LAN 28 which is already connected to base station 18-1, see fig. 8, p.6-7, [0070]-[0071]).

Regarding **claim 2**, as applied to claim 1, Gallagher et al further discloses wherein said information (signal strengths and/or range numbers, see p.6, [0071) is indicative of a location of the mobile wireless communication apparatus (range number indicates the distance between the base station and the device 12, see p.6, [0070]).

Regarding **claim 3**, as applied to claim 1, Gallagher et al inherently teaches wherein said information (signal strengths and/or range numbers, see p.6, [0071) is indicative of wireless channel conditions at the wireless mobile communication apparatus (as device 12 moves toward T3, the channel conditions worsen, but at T1 and T2 the device is serviced by 18-1 because the channel conditions are favorable, see p.6-7, [0071]).

Regarding **claim 5**, as applied to claim 1, Gallagher further discloses wherein said information (signal strengths and/or range numbers, see p.6, [0071) is indicative of operational capabilities of the wireless mobile communication apparatus (as the subscriber device 12 moves toward T3, the signal strength decreases at 18-1 and increases at 18-2, see fig. 8, p.6, [0063], [0071], and p.7, [0071]).

Regarding **claim 7**, as applied to claim 1, Gallagher et al further discloses wherein said first fixed-site wireless communication apparatus includes a cellular base station (base station 18-1, see fig. 8, p.6, [0069]).

Regarding **claim 8**, as applied to claim 7, Gallagher et al further discloses wherein said second fixed-site wireless communication apparatus includes a cellular base station (base station 18-2, see fig. 8, p.6, [0069]).

Regarding **claim 9**, as applied to claim 1, Gallagher et al further discloses wherein said second fixed-site wireless communication apparatus includes a cellular base station (base station 18-2, see fig. 8, p.6, [0069]).

Regarding **claim 10**, as applied to claim 1, Gallagher et al further discloses wherein said wired communication channel (LAN 28, see fig. 8, p.6, [0069]) traverses a cellular network infrastructure (LAN 28 connects 18-1 and 18-2, in coverage areas 604 and 606, see fig. 8, p.6, [0069]).

Regarding **claim 11**, as applied to claim 1, Gallagher et al inherently teaches wherein said first fixed-site wireless communication apparatus (base station 18-1, see fig. 8, p.6, [0069]) is further for communicating via said wired communication channel (LAN 28, see fig. 8, p.6, [0069]) to said second fixed-site wireless communication apparatus (base stations 18-1 and 18-2 communicate with each other through LAN 28, see fig. 8, p.6, [0069]) a request to reserve a predetermined wireless communication resource (signal strengths and/or range numbers, see p.6, [0071) for use by the wireless mobile communication apparatus (base station 18-1 receives a request from 18-2 and forwards the call to base station 18-2 to continue the service, see p.7, [0072]).

Regarding **claim 12**, as applied to claim 11, Gallagher et al further discloses wherein the mobile communication apparatus is involved in a moving wireless communication wireless communication session (as device 12 moves toward T3, the channel conditions worsen, but at T1 and T2 the device is serviced by 18-1 because the channel conditions are favorable, see p.6-7, [0071]) that is utilizing said predetermined wireless communication resource (signal strengths and/or range numbers of the subscriber device 12, see p.6, [0071).

Regarding **claim 13**, as applied to claim 1, Gallagher et al further discloses wherein said first fixed-site wireless communication apparatus (base station 18-1, see fig. 8, p.6, [0069]) is further for receiving from the wireless mobile communication apparatus (subscriber device 12, see fig. 8, p.6, [0069]) information indicative of said predetermined wireless communication resource (device 12 broadcasts a message containing the signal strength and range numbers to base station 18-1 as it moves to T3, see fig. 8, p.6-7, [0071]).

Regarding **claim 15**, as applied to claim 1, Gallagher et al inherently teaches wherein said first fixed-site wireless communication apparatus (base station 18-1, see fig. 8, p.6, [0069]) is for receiving said information (signal strengths and/or range numbers, see p.6, [0071) from a plurality of wireless mobile communication apparatus (it is inherent that a base station is able to receive more than one dedicated signal from multiple mobile stations within a given service area, see fig. 1, p.6, [0069]) and for communicating said information for each wireless mobile communication (base station 18-2 receives the message via LAN 28 which is already connected to base station 18-1, see fig. 8, p.6-7, [0070]-[0071]).

Regarding **claim 16**, Gallagher et al discloses a method of supporting wireless communication, comprising: a first fixed-site wireless communication apparatus (base station 18-1, see fig. 8, p.6, [0069]) receiving from a wireless mobile communication apparatus (subscriber device 12, see fig. 8, p.6, [0069]) information (signal strengths and/or range numbers, see p.6, [0071) for use in determining whether a desired wireless communication session involving the wireless mobile communication apparatus will be established (device 12 broadcasts a message containing the signal strength and range numbers to base station 18-1 as it moves to T3, see fig. 8, p.6-7, [0071]), and using a wired communication channel (LAN 28, see fig. 8, p.6, [0069]) to communicate the information from the first fixed-site wireless communication apparatus to a second fixed-site wireless communication apparatus (base station 18-2 receives the message via LAN 28 which is already connected to base station 18-1, see fig. 8, p.6-7, [0070]-[0071]).

Regarding **claim 17**, as applied to claim 16, Gallagher et al further discloses wherein said information (signal strengths and/or range numbers, see p.6, [0071) is indicative of a location of the mobile wireless communication apparatus (range number indicates the distance between the base station and the device 12, see p.6, [0070]).

Regarding **claim 18**, as applied to claim 16, Gallagher et al inherently teaches wherein said information (signal strengths and/or range numbers, see p.6, [0071) is indicative of wireless channel conditions at the wireless mobile communication apparatus (as device 12 moves toward T3, the channel conditions worsen, but at T1 and T2 the device is serviced by 18-1 because the channel conditions are favorable, see p.6-7, [0071]).

Regarding **claim 20**, as applied to claim 16, Gallagher further discloses wherein said information (signal strengths and/or range numbers, see p.6, [0071) is indicative of operational capabilities of the wireless mobile communication apparatus (as the subscriber device 12 moves toward T3, the signal strength decreases at 18-1 and increases at 18-2, see fig. 8, p.6, [0063], [0071], and p.7, [0071]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gallagher et al (20040192211)** in view of **Kil (20010046855)**.

Regarding **claim 4**, as applied to claim 1, Gallagher discloses the claimed invention except wherein the information is indicative of wireless communication resource use in a previous communication session involving the wireless mobile device.

In the same field of endeavor, Kil discloses wherein the information (power related information, see fig. 2, p.3, [0031]) is indicative of wireless communication resource used (power level of the mobile station, see p.3, [0032]) in a previous communication session involving the wireless mobile device (the base station receives power related information which is used to determine the power level of the mobile station, and the power level of the mobile station is used to determine if the mobile station has seceded the cell, see fig. 2, p.3, [0031]-[0032]).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Kil into the system of Gallagher et al for the benefit of providing a method of indicating that a subscriber terminal is outside its service area.

Regarding **claim 19**, as applied to claim 16, Gallagher discloses the claimed invention except wherein the information is indicative of wireless communication resource use in a previous communication session involving the wireless mobile device.

In the same field of endeavor, Kil discloses wherein the information (power related information, see fig. 2, p.3, [0031]) is indicative of wireless communication resource used (power level of the mobile station, see p.3, [0032]) in a previous communication session involving the wireless mobile device (the base station receives power related information which is used to determine the power level of the mobile station, and the power level of the mobile station is used to determine if the mobile station has seceded the cell, see fig. 2, p.3, [0031]-[0032]).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Kil into the system of Gallagher et al for the benefit of providing a method of indicating that a subscriber terminal is outside its service area.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gallagher et al (20040192211)** in view of **Musikka et al (20020015392)**.

Regarding **claim 6**, as applied to claim 1, Gallagher discloses the claimed invention except wherein said communication channel utilizes internet protocol (IP) to communicate said information from said first fixed-site wireless communication apparatus to said second fixed-site wireless communication apparatus.

In the same field of endeavor, Musikka et al discloses wherein said communication channel (IP/port 305a and IP/port 305b, see fig. 4, p.2-3, [0030]) utilizes internet protocol (IP) to communicate said information (BTS 306 sends speech packets to BTS 308, see p.3, [0030]) from said first fixed-site wireless communication apparatus (BTS 306, see fig. 4, p.3, [0030]) to said second fixed-site wireless communication apparatus (BTS 308, see fig. 4, p.3, [0030]).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Musikka et al into the system of Gallagher et al for the benefit of providing a method of routing calls in an IP-based base station subsystem (IP-BSS).

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gallagher et al (20040192211)** in view of **Ezaki (6,594,485)**.

Regarding **claim 14**, as applied to claim 1, Gallagher et al discloses the claimed invention, in addition Gallagher et al discloses said second fixed-site wireless communication apparatus (base station 18-2, see p.6, [0069]) further for communicating said further information (signal strengths and/or range numbers, see p.6, [0071) to said first fixed-site wireless communication apparatus via said wired communication channel (base stations 18-1 and 18-2 communicate with each other through LAN 28, see fig. 8, p.6, [0069]).

Gallagher et al fails to disclose wherein said second fixed-site wireless communication apparatus is for receiving from a further wireless mobile communication apparatus further information for use in determining whether a further desired wireless communication session involving the further wireless mobile communication apparatus will be established.

In the same field of endeavor, Ezaki teaches wherein said second fixed-site wireless communication apparatus (second radio base station 5, see fig. 1, col. 10, line 47) is for receiving from a further wireless mobile communication apparatus (second mobile terminal 2, see fig. 1, col. 10, line 48) further information (signal for requesting establishment of link channel, see col. 10, lines 47-52) for use in determining whether a further desired wireless communication session involving the further wireless mobile communication apparatus will be established (second mobile terminal 2 transmits a signal to the second base station 5 requesting establishment of a communication link, see figs. 1 and 3A, col. 10, lines 48-57).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Booth (EP 635990) discloses a handover method in a cellular mobile communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olumide T. Ajibade-Akonai whose telephone number is 571-272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OA

CHARLES APPIAH
PRIMARY EXAMINER